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Billy Hogan

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NIXON & VANDERHYE, PC  
901 NORTH GLEBE ROAD, 11TH FLOOR  
ARLINGTON, VA 22203

EXAMINER

NGUYEN, KHAI MINH

ART UNIT

PAPER NUMBER

2617

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/068,001	<b>Applicant(s)</b> HOGAN ET AL.	
	<b>Examiner</b> KHAI M. NGUYEN	<b>Art Unit</b> 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 2-5, 7-15, 17, 19, 43-53, 55-70, 72 and 87-92 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 17, 19, 52, 53, 70 and 72 is/are allowed.
- 6) ☒ Claim(s) 2-4, 7-9, 12, 43-47, 50-51, 55-57, 59-60, 65, 68-69, 87-89, and 90-92 is/are rejected.
- 7) ☒ Claim(s) 5, 10, 11, 13-15, 48, 49, 63, 64 and 66-68 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/12/2008 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 2-5, 7-15, 17, 19, 43-53, 55-70, 72, and 87-92 have been considered but are moot in view of the new ground(s) of rejection.

Claims 7, 17, 19, 46, 52-53, 60, 70, and 72 have been amended.

Salmela clearly discloses wherein the user equipment unit upon receiving the access group eligibility message compares the stored access group classification with contents of the access group eligibility message to determine whether the user equipment unit is allowed access to the cell for which the access group eligibility message is transmitted (pg.5, line 28 to pg.6, line 20 (the mobile station can compare the identifier received from the base transceiver station with the stored list. If the identifier of the base transceiver station corresponds (or does not correspond) to the identifier on the stored list,...For example, it may cut off a call which cannot be maintained in the LSA area.))

Nordstrand clearly discloses wherein the user equipment unit stores an access group classification obtained from the access group classification message in a memory at the user equipment unit (fig.2: 205 (SIM with PLMN access information), col.4, lines 6-50).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-3, 7, 60, 55-56, 59, and 68-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salmela, Seija (WO 98/30056) in view of Nordstrand (U.S.Pat-6334052).

Regarding claim 7, Salmela teaches a telecommunications network comprising a radio access network which generates and transmits (fig.1, pg.2, lines 6-17), in a broadcast channel over an air interface (fig.1, pg.2, lines 6-17), an access group eligibility message which enables a user equipment unit which receives the access group eligibility message to make a determination whether the user equipment unit is eligible to operate or not operate in a cell for which the access group eligibility message is transmitted (abstract, pg.4, lines 2-30, pg.5, line 14 to pg.6, line 20), the determination involving a comparison of access group eligibility information transmitted in the access group message and an access group (pg.5, line 14 to pg.6, line 20), the access group

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classification having been generated by a core network node (fig.1, pag.5, lines 14-27), which classified the user equipment unit into at least one of plural access groups (fig.1, abstract);

wherein the user equipment unit upon receiving the access group eligibility message compares the stored access group classification with contents of the access group eligibility message to determine whether the user equipment unit is allowed access to the cell for which the access group eligibility message is transmitted (pg.5, line 28 to pg.6, line 20 (the mobile station can compare the identifier received from the base transceiver station with the stored list. If the identifier of the base transceiver station corresponds (or does not correspond) to the identifier on the stored list,...For example, it may cut off a call which cannot be maintained in the LSA area.))

Salmela fails to specifically disclose group classification; wherein the user equipment unit stores an access group classification obtained from the access group classification message in a memory at the user equipment unit.

However, Nordstrand teaches an access group classification (col.4, lines 6-50); wherein the user equipment unit stores an access group classification obtained from the access group classification message in a memory at the user equipment unit (fig.2: 205 (SIM with PLMN access information), col.4, lines 6-50).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Nordstrand with Salmela to provide a method for supplying services to mobile station.

Regarding claim 2, Salmela and Nordstrand further teach the apparatus of claim 7, wherein the access group eligibility message indicates what subscriber groups are eligible to operate in the cell for which the access group eligibility message is transmitted (see Salmela, abstract, pg.4, lines 2-30, pg.5, line 14 to pg.6, line 20).

Regarding claim 3, Salmela and Nordstrand further teach the apparatus of claim 7, wherein the access group eligibility message indicates what restriction groups are not eligible to operate in the cell for which the access group eligibility message is transmitted (see Salmela, abstract, pg.4, lines 2-30, pg.5, line 14 to pg.6, line 20).

Regarding claim 60, Salmela teaches a method of operating a telecommunications network comprising:

transmitting, in a broadcast channel over an air interface (fig.1, pg.2, lines 6-17), an access group eligibility message generated by a radio access network (fig.1, abstract, pg.2, lines 6-17, pg.4, lines 2-30);

receiving the access group eligibility message at a user equipment unit (fig.1, abstract, pg.4, lines 2-30);

the user equipment unit using the access group eligibility message to make determination whether the user equipment unit is eligible to operate or not operate in a cell for which the access group eligibility message is transmitted (fig.1, abstract, pg.4, lines 2-30), the determination involving a comparison of access group eligibility information transmitted in the access group message and an access group (pg.5, line 14 to pg.6, line 20), which is generated by a core network (fig.1, pag.5, lines 14-27).

the user equipment unit (fig.1: MS), upon receiving the access group eligibility message (pg.5, line 28 to pg.6, line 20), comparing the stored access group with contents of the access group eligibility message to determine whether the user equipment unit is allowed access to the cell for which the access group eligibility message is transmitted (pg.5, line 28 to pg.6, line 20 (the mobile station can compare the identifier received from the base transceiver station with the stored list. If the identifier of the base transceiver station corresponds (or does not correspond) to the identifier on the stored list,...For example, it may cut off a call which cannot be maintained in the LSA area.)).

Salmela fails to specifically disclose an access group classification; storing in a memory at the user equipment unit the access group obtained from an access group classification message.

However, Nordstrand teaches an access group classification (col.4, lines 6-50); storing in a memory at the user equipment unit the access group obtained from an access group classification message (fig.2: 205 (SIM with PLMN access information), col.4, lines 6-50).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Nordstrand with Salmela to provide a method for supplying services to mobile station.

Regarding claim 55 is rejected with the same reasons set forth in claim 2.

Regarding claim 56 is rejected with the same reasons set forth in claim 3.

Regarding claim 59 is rejected with the same reasons set forth in claim 7.

Regarding claim 68, Salmela and Nordstrand further teach the method of claim 46,

Nordstrand further teaches the access group classification is transmitted in an access group classification message is one of a location update response (col.4, lines 29-50, col.10, line 35 to col.11, line 10) and a location update reject message which includes the access group classification (col.4, lines 29-50, col.10, line 35 to col.11, line 10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Nordstrand with Salmela to provide a method for supplying services to mobile station.

Regarding claim 69, Nordstrand and Salmela further teach the apparatus of claim 46, wherein the access group classification message includes the access group classification (see Salmela, fig.1, abstract, pg.4, lines 2-30, pg.5, line 14 to pg.6, line 20) and a version field associated with the access group classification (see Salmela, fig.1, abstract, pg.4, lines 2-30, pg.5, line 14 to pg.6, line 20).

5. Claims 4, 8-9, 12, 43-47, 50-51, 57, 65, and 90-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salmela, Seija (WO 98/30056), in view of Nordstrand (U.S.Pat-6334052), and further in view of Philip Reynolds (GB 2315193).

Regarding claim 4, Nordstrand and Salmela further teach the apparatus of claim 1,



Nordstrand and Salmela fail to specifically disclose wherein the access group eligibility message includes a bitmap which indicates eligibility for plural access groups.

However, Philip teaches wherein the access group eligibility message includes a bitmap which indicates eligibility for plural access groups (fig.8, pg.18, line 8 to pg.19, line 24 (items 108 and 122))

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Philip to Nordstrand and Salmela to provide a method for providing location specific service provider information to a mobile station.

Regarding claim 8, Nordstrand and Salmela further teach 8. The apparatus of claim 7,

Nordstrand and Salmela fail to specifically disclose the access group eligibility message includes a first bitmap which indicates eligibility for the plural access groups; wherein the access group classification message includes a second bitmap which advises the user equipment unit as to which of the plural access groups the user equipment unit belongs.

However, Philip teaches the access group eligibility message includes a first bitmap which indicates eligibility for the plural access groups fig.8, pg.18, line 8 to pg.19, line 24 (items 108 and 122)); wherein the access group classification message includes a second bitmap which advises the user equipment unit as to which of the

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plural access groups the user equipment unit belongs (fig.8, pg.18, line 8 to pg.19, line 24 (items 108 and 122)).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Philip to Nordstrand and Salmela to provide a method for providing location specific service provider information to a mobile station.

Regarding claim 9, Nordstrand, Salmela, and Philip further teach the apparatus of claim 8, wherein the user equipment unit performs a logical operation with respect to the first bitmap and the second bitmap to determine whether the user equipment unit is allowed access to the cell for which the access group eligibility message is transmitted (see Philip, fig.8, pg.18, line 8 to pg.19, line 24 (items 108 and 122)).

Regarding claim 12, Nordstrand, Salmela, and Philip further teach the apparatus of claim 7,

Nordstrand and Salmela fail to specifically disclose the user equipment unit is in one of an IDLE mode and one of the following states of a CONNECTED mode: CELL FACH state; CELL PCH state; and URA PCH state.

However, Philip the user equipment unit is in one of an IDLE mode and one of the following states of a CONNECTED mode: CELL\_FACH state; CELL\_PCH state; and URA\_PCH state (pg.15, lines 6-23).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Philip to Nordstrand and Salmela to provide a method for providing location specific service provider information to a mobile station.

Regarding claim 46, Salmela teaches a user equipment unit which receives over an air interface an access group classification message and an access group eligibility message (fig.1, abstract, pg.5, line 14 to pg.6, line 20), the access group classification message being generated by a core network node for advising the user equipment unit as to which of the plural access groups the user equipment unit belongs (fig.1, abstract, pg.5, line 14 to pg.6, line 20), the access group eligibility message being generated by a radio access network node for specifying eligibility of plural access groups to operate or not operate in a cell for which the access group eligibility message is transmitted (fig.1, abstract, pg.4, lines 2-30, pg.5, line 14 to pg.6, line 20), the user equipment unit comprising:

an access controller which stores an access group classification (not show) obtained from the access group eligibility message compares the stored access group with contents of the access group eligibility message (pg.5, line 14 to pg.6, line 20) to determine whether the user equipment unit is allowed access to the cell for which the access group eligibility message is transmitted (fig.1, abstract, pg.4, lines 2-30).

Salmela fails to specifically disclose an access group classification.

However, Nordstrand teaches an access group classification (col.4, lines 6-50).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Nordstrand with Salmela to provide a method for supplying services to mobile station.

Salmela and Nordstrand fail to specifically disclose wherein the access group eligibility message includes a bitmap which indicates eligibility for plural access groups; wherein the access group eligibility message includes a first bitmap which indicates eligibility for the plural access groups; wherein the access group classification message includes a second bitmap which advises the user equipment unit as to which of the plural access groups the user equipment unit belongs.

However, Philip teaches wherein the access group eligibility message includes a bitmap which indicates eligibility for plural access groups (fig.8, pg.18, line 8 to pg.19, line 24 ( step 108:display public cell)); wherein the access group eligibility message includes a first bitmap which indicates eligibility for the plural access groups (fig.8, pg.18, line 8 to pg.19, line 24 (item 108:display public cell)); wherein the access group classification message includes a second bitmap which advises the user equipment unit (fig.8: item 122) as to which of the plural access groups the user equipment unit belongs (fig.8, pg.18, line 8 to pg.19, line 24 ( step 122:display other PLMN service indicator))

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Philip to Salmela and Nordstrand to provide a method for providing location-specific service provider information to a mobile station.

Regarding claim 43, Salmela, Nordstrand, and Philip further teach the apparatus of claim 46, wherein the access group eligibility message indicates what subscriber groups are eligible to operate in the cell for which the access group eligibility message is transmitted (see Salmela, fig.1, abstract, pg.4, lines 2-30, pg.5, line 14 to pg.6, line 20).

Regarding claim 44, Salmela, Nordstrand, and Philip further teach the apparatus of claim 46, wherein the access group eligibility message indicates what restriction groups are not eligible to operate in the cell for which the access group eligibility message is transmitted (see Salmela, fig.1, abstract, pg.4, lines 2-30, pg.5, line 14 to pg.6, line 20).

Regarding claim 45 is rejected with the same reasons set forth in claim 4.

Regarding claim 47 is rejected with the same reasons set forth in claim 9.

Regarding claim 50, Salmela, Nordstrand, and Philip further teach the method of claim 46,

Nordstrand further teaches the access group classification is transmitted in an access group classification message is one of a location update response (col.4, lines 29-50, col.10, line 35 to col.11, line 10) and a location update reject message which includes the access group classification (col.4, lines 29-50, col.10, line 35 to col.11, line 10).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Nordstrand with Salmela to provide a method for supplying services to mobile station.

Regarding claim 51, Nordstrand and Salmela further teach the apparatus of claim 46, wherein the access group classification message includes the access group classification (see Salmela, fig.1, abstract, pg.4, lines 2-30, pg.5, line 14 to pg.6, line 20) and a version field associated with the access group classification (see Salmela, fig.1, abstract, pg.4, lines 2-30, pg.5, line 14 to pg.6, line 20).

Regarding claim 57 is rejected with the same reasons set forth in claim 4.

Regarding claim 65 is rejected with the same reasons set forth in claim 12.

Regarding claim 90, Nordstrand and Salmela further teach the apparatus of claim 7,

Nordstrand and Salmela fail to specifically disclose the access group classification is received individually by the user equipment unit, and wherein the user equipment unit is configured to make the determination whether the user equipment unit is eligible to operate or not in the cell without the user equipment unit establishing a connection with the radio access network.

However, Philip teaches the access group classification is received individually by the user equipment unit, and wherein the user equipment unit is configured to make the determination whether the user equipment unit is eligible to operate or not in the cell

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without the user equipment unit establishing a connection with the radio access network (pg.18, line 26 to pg.19, lines 24).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Philip to Nordstrand and Salmela to provide a method for providing location specific service provider information to a mobile station.

Regarding claim 91 is rejected with the same reasons set forth in claim 90.

Regarding claim 92 is rejected with the same reasons set forth in claim 90.

6. Claims 87 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salmela, Seija (WO 98/30056), in view of Nordstrand (U.S.Pat-6334052), and further in view of Background of the invention.

Regarding claim 87, Nordstrand and Salmela further teach the apparatus of claim 7,

Nordstrand and Salmela fail to specifically disclose the access group eligibility information comprises a subscriber group having a composition pre-agreed with a network operator.

However, Background of the invention teaches the access group eligibility information comprises a subscriber group having a composition pre-agreed with a network operator ([0018]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Background of the invention to Nordstrand and Salmela to provide the service for mobile device.

Regarding claim 89 is rejected with the same reasons set forth in claim 87.

7. Claim 88 is rejected under 35 U.S.C. 103(a) as being unpatentable over Salmela, Seija (WO 98/30056), in view of Nordstrand (U.S.Pat-6334052), in view of Philip Reynolds (GB 2315193), and further in view of Background of the invention.

Regarding claim 88, Nordstrand, Salmela, and Philip further teach the apparatus of claim 46,

Nordstrand, Salmela, and Philip fail to specifically disclose the access group eligibility information comprises a subscriber group having a composition pre-agreed with a network operator.

However, Background of the invention teaches the access group eligibility information comprises a subscriber group having a composition pre-agreed with a network operator ([0018]).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Background of the invention to Nordstrand, Salmela, and Philip to provide the service for mobile device.



***Allowable Subject Matter***

8. Claims 5, 10-11, 13-15, 48-49, 58, 63-64, and 66-67 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 17, 19, 52-53, 70, and 72 are allowed.

The following is an examiner's statement of reasons for allowance:

Applicant's independent claims 17, 52, and 70: The present invention is directed to telecommunication network, the independent claim identifies the patentably distinct feature, "wherein upon receiving a subsequent core network message in the form of one of a location update response or location update reject message, the subsequent core network message including a potentially revised access group classification and a version field associated with the access group classification carried by the subsequent core network message, the user equipment unit determines, by comparing contents of the version field associated with the access group classification and the version field associated with the access group classification carried by the subsequent core network message, whether the user equipment unit should update its stored access group classification". Applicant's independent claims 17, 52, and 70 comprise a particular combination of elements, which is neither taught nor-suggested by prior art.

Applicant's independent claims 19, 53, and 72: The present invention is directed to telecommunication network, the independent claim identifies the patentably distinct feature, "wherein upon entering a new cell associated with a second core

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network, the user equipment unit receives an access group eligibility message transmitted for the new cell, the access group eligibility message transmitted for the new cell including a version field associated with the contents of the access group eligibility message transmitted for the new cell, and wherein the user equipment unit determines, by comparing contents of the version field associated with the access group classification and the version field associated with the access group eligibility message transmitted for the new cell, whether the user equipment unit should update its stored access group classification". Applicant's independent claims 19, 53, and 72 comprise a particular combination of elements, which is neither taught nor-suggested by prior art.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI M. NGUYEN whose telephone number is (571)272-7923. The examiner can normally be reached on 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent P. Harper can be reached on 571.272.7605. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VINCENT P. HARPER/  
Supervisory Patent Examiner, Art Unit 2617

/Khai M Nguyen/  
Examiner, Art Unit 2617

11/20/2009